10. WHAT WETLANDS AND ENDANGERED SPECIES REGULATIONS APPLY TO RURAL ELECTRIC COOPERATIVE ACTIVITIES?

The development, operation, and maintenance of Rural Electric Cooperative facilities have the potential to impact both aquatic resources (particularly wetlands) and endangered species. Potential impacts to these resources may result from a variety of activities but are primarily associated with construction and maintenance of power lines, and construction of sub stations or other facilities. The impact your cooperative's activities have on aquatic resources (particularly wetlands) and endangered species depends, to a large part, on whether you are dealing with above or below ground power lines and the extent of any new ground disturbance.

Aquatic resources, particularly wetlands, and endangered species are protected by federal legislation and in some areas, state and local regulations also apply. In many cases, before you begin your construction project, you are required to obtain a special permit for impacting aquatic areas, such as wetlands, or endangered species habitat. You need to be familiar with applicable regulations; otherwise, your project could experience unnecessary delays, additional expense, or even a notice of violation. To avoid these problems, consultation with relevant state and federal agencies *early* in the planning process is strongly recommended. The regulatory agencies are available to assist you with planning your project such that impacts to aquatic resources and endangered species are minimized as well as guide you through the permitting process. Adherence to the statutes, coupled with early agency consultation can help your cooperative avoid construction delays and the likelihood that you will find yourself in violation.

USEFUL TIP

Since the regulatory agencies for wetlands and endangered species are often very busy, you should consider hiring an environmental consultant to speed up the regulatory process. Be sure to hire a qualified consultant with local knowledge of the resource, regulations, and agencies.

This chapter is divided into four sections: 1) General Overview of the U.S. Army Corps of Engineers Regulatory Program (Section 10.1); 2) Wetlands (Section 10.2); 3) Endangered Species (Section 10.3); and 4) Resources (Section 10.4). These sections define the respective resources and discuss how to determine if regulations protecting these resources may apply to your activity. Following a definition of the resource in each section, a discussion of necessary permitting and

approvals is included to help you understand the permitting process. Finally, Chapter 10 concludes with a list of additional information resources (Section 10.4) available to help with your questions and permit needs.

10.1 THE ARMY CORPS OF ENGINEERS REGULATORY PROGRAM – GENERAL OVERVIEW

Those portions of the U.S. Army Corps of Engineers (Corps) Regulatory Program which have the potential to involve Rural Electric Cooperative (Cooperative) facilities are administered pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. The Corps regulates dredging and general construction in, over, and under navigable waters of the United States (waters that are, were, or could be used for the transportation of interstate commerce) under Section 10. Therefore, activities such as aerial crossings of rivers and streams require a Corps Section 10 permit. The Corps also regulates the discharge of dredged and fill material into waters of the United States which includes navigable waters of the United States as well as all waters and associated wetlands. Activities such as excavating trenches to bury cable, as well as fill for substations and towers, require a Corps Section 404 permit. The U.S. Environmental Protection Agency's (EPA) authority under Section 404 includes veto power of Corps permits, authority to interpret statutory exemptions and jurisdiction, enforcement actions, and delegating the Section 404 program to the states. As may be seen, a wide range of Cooperative facilities, and activities, may need Corps permits. However, since wetlands and endangered species are areas which have the potential to engender controversy and project delay, particular attention is paid to these resources in the following sections.

10.2 WETLANDS

Wetlands are a subset of "waters of the United States" as defined in the Clean Water Act, Section 404, and in the Code of Federal Regulations (CFR). As provided in 33 CFR Part 328, the Corps regulates the placement of dredge and fill material (see box) into wetlands and other water bodies (i.e., waters of the United States). The Corps regulates wetlands

USEFUL TIP

The definition of "dredge or fill" material may not be obvious. Activities such as burying powerlines under wetlands, moving equipment through wetlands, and dewatering or draining wetlands may be regulated as dredging and filling activities. The best approach is to discuss your project with the local Corps office before beginning work.

by administering the Section 404 Permit Program for activities that impact wetlands.

10.2.1 What Is a Wetland?

Wetland definition

Swamps, marshes, fens, bogs, vernal pools, playas, and prairie potholes are common names for wetlands. Many of these names reflect local or regional conditions and terminology and it is therefore important to note that not all wetlands will be obvious to the untrained observer. For example, an area can appear dry during much of the year and still be classified as a wetland. Consequently, a qualified wetland scientist must be used to identify and delineate wetlands. A knowledgeable consultant will be able to delineate wetlands and, if necessary, assist in the permit application process. The Corps, however, must review all wetland delineations before they become final.

DEFINITION

The legal definition of a wetland is:

"...those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." (33 CFR Part 328).

Wetlands often provide habitat for threatened and endangered species as well as a diversity of other plant, wildlife, and fish species. In addition to providing habitat, wetlands serve other functions, including: shoreline stabilization; storage of flood waters; filtration of sediments, nutrients, and toxic chemicals from water; and serve as recharge and discharge areas for ground water. Destruction of wetlands can result in higher downstream water treatment costs and the potential for flood damage increases as wetland acreage diminishes.

10.2.2 How Are Wetlands Identified?

Wetland identification criteria

Since 1991, the Corps has required use of the 1987 *Corps of Engineers Wetlands Delineation Manual* (1987 Manual) to identify and delineate wetlands within the jurisdiction of Section 404 of the Clean Water Act. Wetland delineations made using this manual are often referred to as "jurisdictional wetlands." The 1987 Manual contains specific methods for determining the presence/absence of the three wetland criteria: hydric soils, hydrophytic vegetation, and wetland hydrology (these are defined below). In general, areas that exhibit all three criteria are considered jurisdictional wetlands and are regulated by the Corps under Section 404. It is important to note, however, that in some cases, "atypical" or

"problem" areas (as defined in the 1987 Manual) may still be classified as jurisdictional wetlands despite the absence of one or more criteria. The following section contains a brief summary of each of the three wetland criteria.

- ***Hydrology***—The most important factor in the formation, and maintenance, of wetlands is water. Water can come from a variety of sources including precipitation, ground water discharge, surface water flow, and tides. Wetlands are often found where water saturates (i.e., water-soaked soil) or inundates (e.g., floods or ponds) soils for an extended period during the plant growing season. Wetland hydrology data is normally derived from observation, direct measurements such as stream gauge data, or ground water monitoring wells.

- ***Soils***—The prolonged presence of water in the soil (a condition typical of many wetlands) reduces the amount of oxygen in the soil. Soils exhibiting characteristics of oxygen depletion, including changes in color and texture, are considered hydric. County soil maps and a list of hydric soils are generally available from your county's U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) office. Nevertheless, proper identification of wetland soils requires digging soil pits and examining the soil profile.

- ***Vegetation***—The amount of water and depth of soil saturation during the growing season limits the species of plants that can grow in wetland areas. Plants that do well in water saturated or inundated wetland soils are known as hydrophytic vegetation. These plants tolerate water-soaked, and oxygen depleted, soils and continue to grow when partially submerged. Plants not adapted to these wet environments will die, or grow poorly, under wetland conditions. The U.S. Fish and Wildlife Service (USFWS) publishes a list of plant species that occur in wetlands and the frequency with which they occur (see Section 10.4).

Identifying Wetlands Using the National Wetland Inventory Maps

The USFWS publishes National Wetland Inventory (NWI) maps for many areas of the country. These maps identifying wetland and deep water habitats are superimposed on U.S. Geological Survey 7½ minute topographic maps. Deep water habitats are permanently flooded areas generally devoid of vegetation and at least 6.6 feet deep. NWI maps are often used in conjunction with other sources of information when

determining the likelihood of wetlands being present on a site. The USFWS produces these maps by examining aerial photographs and conducting follow-up field investigations; however, these maps may miss certain types of jurisdictional wetlands and in some cases the maps include water bodies not under the Corps' jurisdiction. Consequently, NWI maps cannot be used as the only source to determine if your project area contains wetlands. You will still need a qualified wetland scientist to conduct a wetland delineation.

10.2.3 What If My Proposed Project Area Includes Wetlands?

Who needs a Section 404 permit?

Because wetlands and the regulations protecting them are dynamic, it is important to check with the Corps district office even if you think a General Permit (see Section 10.2.4) applies to your activity. To ensure compliance with Section 404, the Corps district office may request submission of a permit application even if your activity may be covered by an existing general permit (see Section 10.2.4).

USEFUL TIP

Placement of pilings in waters of the United States that does not have or would not have the effect of a discharge of fill material shall not require a Section 404 permit. Placement of pilings for linear projects, such as bridges, elevated walkways, and powerline structures, generally does not have the effect of a discharge of fill material (33 CFR Part 323.3(c)).

If your project area includes wetlands, the Corps district office may also suggest that your cooperative retain a consultant to delineate wetland boundaries. In addition to conducting the wetland delineation, some wetland consultants (see Section 10.4) can also help with the permit application process.

10.2.4 What Is a Wetland Permit?

The Corps reviews permit applications pursuant to RHA Section 10 and CWA Section 404, and must determine that the project represents the least environmentally damaging, practicable alternative, and that the project will not be contrary to the public interest. The EPA typically provides the Corps with comments on Section 10 and Section 404 permit applications, and they have veto authority under Section 404. Permits are administered by the Corps as either Individual or General Permits.

Individual Permits

Individual Permits are issued on a case-by-case basis, involve more time and Corps involvement than General Permits, and are commonly required for larger projects. Individual Permits require submission of an application form describing specific aspects of the proposed activity (see box).

USEFUL TIP – WHERE TO GET APPLICATION FORMS

Application forms are available from your local Corps office. As part of the application you are required to submit a detailed description of the proposed activities and locations (including a detailed topographic map), names and addresses of all property owners and lessees whose property adjoins the impacted wetland, information concerning activities already complete, amount of fill material to be placed in wetlands, and information about approvals or denials from other government agencies.

Once the Corps has reviewed the Individual Permit application, they will issue a public notice containing information necessary to evaluate potential impacts to wetlands. Other agencies that can provide comments in response to the public notice include USFWS, National Marine Fisheries Services (NMFS), state and local agencies. Adjacent property owners and the general public may also review and comment in response to the public notice. The Corps will issue, or deny, a permit based upon the aforementioned comments, their own analysis and any required environmental documentation (e.g., an environmental assessment or environmental impact statement). After determining that the project complies with Section 404(b)(1) guidelines, and is not contrary to the public interest, the Corps either issue a permit, or issue a permit with conditions (e.g., requiring wetland mitigation). An overview of the Section 404 Individual Permit process is depicted in Figure 10-1.

General Permits

General Permits may be issued on a state, regional, or nationwide basis, and under certain conditions eliminate the need for an Individual Permit. As is the case with Individual Permits, General Permits are developed in accordance with the same public notice process. General permits are

USEFUL TIP

An example of a Nationwide Permit (one form of General Permits) that might be used by a Cooperative is Nationwide Permit No. 12 which permits the discharge of material for utility line backfill or bedding subject to certain stipulated conditions.

The complete list of Nationwide Permits can be found in 33 CFR Part 330.

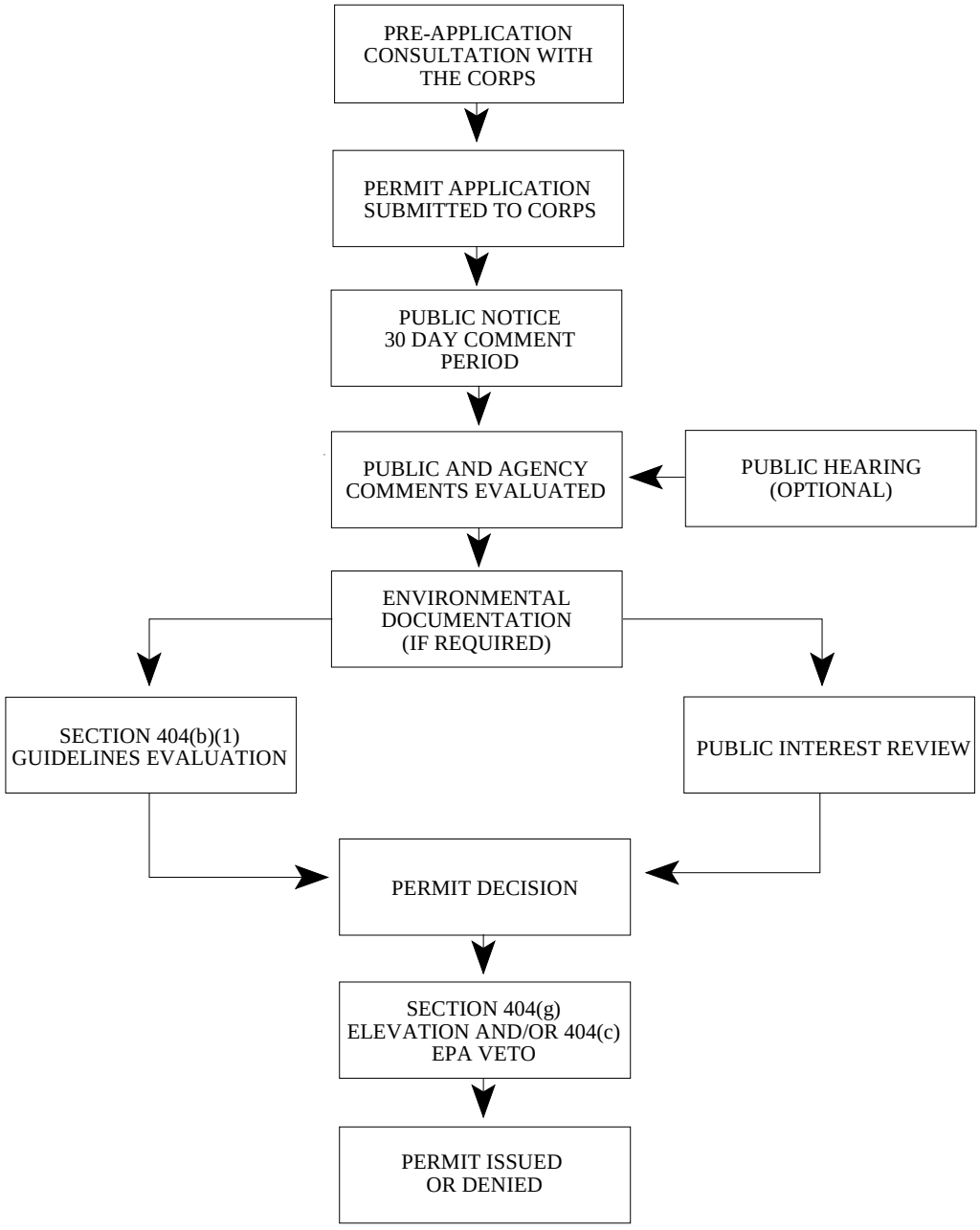

Figure 10-1. Overview of Section 404 Individual Permit Process

issued for a period up to five years provided that the activities covered by the permit are similar in nature and have only minimal impacts (individually and cumulatively) on the environment.

To determine whether your project will require an Individual or General Permit, check with your local Corps office. Your wetland consultant should also be able to give you an idea of which type of permit will be necessary.

10.2.5 Do I Need Other Permits in Addition to the Section 404 Permit?

State/Local Permits

Some state and local governments have laws protecting wetlands. Laws vary from those that authorize states to acquire and preserve wetlands, to those that require permits for construction in wetlands. To find out if your proposed activities require a state permit, contact the appropriate department (e.g., state department of water resources, natural resources, or the environment) in the state where the activities will take place.

USEFUL TIP

Some states or local governments may have stricter wetland regulations than Section 404, so if your activity does not require a Section 404 permit (and involves a wetland) you should still consult with the appropriate state agency .

Permit Conditions and Cross-Cutting Environmental Statutes

Other applicable resolutions

In addition to state and local approvals or permits, each permit may have general project specific conditions which must be adhered to for the permit to be valid. For example, underground utility line projects must ensure that trenching and bedding material do not act as a sub-surface drain and thereby alter wetland hydrology. Other examples of permit conditions for Nationwide Permits (a type of General Permit) include:

- Erosion and Siltation Controls
- Equipment
- Wild and Scenic Rivers
- Tribal Rights
- Water Quality Certification
- Endangered Species
- Historic Properties.

To comply with these conditions your cooperative will need to consider and be familiar with cross-cutting environmental statutes such as the Endangered Species Act (ESA) and the National Historic Preservation Act (NHPA). The ESA is discussed in Section 10.3. The NHPA protects historic properties listed or eligible for listing in the National Register of Historic Places. To comply with the NHPA and related regulations protecting historical and cultural resources, you should contact the State Historic Preservation Office (SHPO) in the state you are working prior to any ground disturbance.

USEFUL TIP

Cross-cutting environmental statutes such as ESA, NHPA, and NEPA may trigger the requirement for an environmental report even though your project doesn't impact wetlands. The trigger for these statutes generally consists of some type of federal government involvement such as the requirement for a Corps permit, easements through public lands, and receipt of government loans or other funds.

Another cross-cutting environmental statute that may need to be addressed during the Section 404 permit process is the National Environmental Policy Act (NEPA). Compliance with NEPA is triggered by involvement with public lands or federal funds and requires some type of environmental documentation such as an Environmental Assessment (EA) or Environmental Impact Statement (EIS).

The Corps must prepare an EA for every individual and general permit it issues. An EIS must be prepared by the Corps for individual permits with potential to significantly impact the quality of the human environment. In addition, if your cooperative requires an easement through U.S. Forest Service, Bureau of Land Management, or other public lands, some type of NEPA documentation will be required from the public land management agency. Your cooperative will participate with the agency in development of this documentation. In addition to use of public land, borrowing funds or receiving grants from the federal government for a particular project may also require NEPA documentation.

10.2.6 What Is Wetland Mitigation and Are There Any Wetland Reporting Requirements?

Mitigation Activities

In accordance with Section 404 (b)(1) guidelines, wetlands mitigation is identified as avoidance, minimization, and compensatory mitigation. The Section 404 Program stresses the avoidance of adverse impacts to wetlands with the goal of no overall net loss of wetland functions and values. To comply with this no net loss goal, project applicants are often

required to mitigate for unavoidable impacts. Mitigation generally includes restoration of degraded wetlands, enhancement of existing wetlands, wetlands creation, or, in rare circumstances, wetlands preservation. Mitigation may also require annual monitoring reports and inspections by the Corps to ensure that the mitigation is successfully replacing lost wetland functions and value.

USEFUL TIP

The most important type of wetland mitigation is avoidance. Your Cooperative can probably save considerable time and money if you can avoid impacting wetlands.

Best management practices

Other permit requirements or terms and conditions of receiving a permit include the use of best management practices (BMPs) during the construction phase. Examples of BMPs include avoiding discharges to spawning areas during spawning season and requiring heavy equipment working in wetlands to be placed on mats (for a list of BMPs refer to 33 CFR Part 323.4).

The Corps' interest in your project continues from the permit authorization phase through project completion. Corps employees have the authority to inspect permitted activities to ensure that permit obligations are being met. Additionally, members of the public, and representatives of other government agencies are encouraged to report suspected Corps permit violations (33 CFR Part 326.4).

10.2.7 Evolving Issues

Several issues related to wetland regulations have generated significant discussion among scientists and policy makers. These discussions could result in changes to how wetlands are permitted, delineated, and regulated. The primary evolving issues for this resource include:

- ***Permits***—Nationwide Permits, one type of General Permit (see 10.2.4), were recently reissued and some received significant modifications. For example, Nationwide Permit No. 26 (which covers headwaters and isolated waters discharges, see 33 CFR 330) will be phased out by the end of 1998. Other general permits can also be modified or revoked at the Corps' discretion so it is best to check with your local Corps office to ensure you are in compliance.

- ***Wetland Identification***—Several manuals are available which describe techniques for delineation and identification of wetlands.

The Corps and EPA currently use the 1987 manual. Check with your local Corps office to ensure that your projects are delineated with the proper manual.

- ***Clean Water Act Reauthorization***—Reauthorization, and associated changes to wetland regulations of the Clean Water Act have been discussed for several years but have yet to occur. This is a politically sensitive topic and the best advice is to keep in touch with your local Corps or EPA office.

- ***Tulloch Ruling***—The courts have been going back and forth on the issue of what constitutes "dredged material," so contact the local Corps office to determine the current definition. As of this writing, the "Excavation Rule" at 33 CFR Part 323.2(d) is in effect. Discharge of dredged material is defined as any addition of dredged material into, including any redeposit of dredged material within, the waters of the United States. It does not include the cutting or removal of vegetation above the ground (e.g., mowing, rotary cutting, and chainsawing) where the activity neither substantially disturbs the root system, nor involves mechanized pushing, dragging, or other similar activities that redeposit excavated soil material (see 33 CFR Part 323.2(d)).

Policy issues relating to aquatic resources, particularly wetlands, are time-dependant and continually evolving. Check with your contacts at the outset of any new project to ensure that your cooperative understands, and is in compliance with, the current regulations.

10.3 ENDANGERED SPECIES

ESA Definitions

The Endangered Species Act (ESA) of 1973, as amended, provides for the conservation of federally-listed threatened and endangered (T&E) species of plants, animals and the habitats upon which they depend. The FSA also, among other things, prohibits the unauthorized "taking" of endangered animal species (see box). Endangered species are plants and animals that, without special protection and management, are in danger of becoming extinct. Threatened species are

DEFINITION

"Take" is defined in the Endangered Species Act as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect any threatened or endangered species, or attempt to engage in such conduct. "Harm" may include significant habitat modification where it actually kills or injures a protected animal species by significantly impairing essential behavioral patterns.

likely to become endangered in the foreseeable future. In addition to protecting these species, the ESA protects designated "critical habitat" required for the species' survival and may require consideration of species and critical habitats that have been proposed for listing but are not yet officially listed. The U.S. Department of the Interior, Fish and Wildlife Service (USFWS) and Department of Commerce, National Marine Fisheries Service (NMFS) are responsible for administering the ESA, maintaining the T&E species list, as well as listing new species or removing species from the list when they recover. As a general matter, USFWS is responsible for terrestrial species and NMFS is responsible for marine species.

Rural Electric Cooperative responsibilities under the ESA depend upon whether or not proposed activities occur with federal government involvement. Federal government involvement is triggered when a project seeks to cross public lands (e.g., utility line easement), receive public funds (e.g., loans, grants, cost share), or requires a federal permit (e.g., Section 404 Wetland Permit, see Sections 10.2.3 & 10.2.4). The ESA is a complicated statute and your utility may want to develop a relationship with a qualified consultant familiar with local species, habitats and the ESA who can assist whenever endangered species issues arise.

USEFUL TIP

This section assumes that your project will involve some type of ground disturbance or other activity that could result in a "take" of T&E animal species. Normal operation of your Cooperative, other than powerline collisions and electrocutions of T&E birds, should not result in a "take" situation.

The first part of this section addresses how to determine if T&E species or their designated critical habitat occur on your site. This is followed by a discussion of the ESA consultation process when there is federal involvement in, or control of, the project. A discussion of ESA implementation for non-federal involvement activities is included. Other species of special concern are discussed, and this section concludes with an identification of evolving issues.

10.3.1 How Do I Determine if My Project Has the Potential to Impact Endangered Species or Their Critical Habitat?

USFWS will determine if T&E clearance surveys are needed

To determine if your project may impact federally-listed or proposed T&E species or their critical habitat you should contact the relevant service (i.e., USFWS or NMFS) field office in your area to determine if any T&E species might occur near your proposed activity. Based on their knowledge and use of T&E databases, the service will identify whether any T&E species or critical habitat (see box) could occur in or near your project area. If they indicate that T&E species could occur in or near your project area, one option may be to arrange for a "clearance survey" to be conducted. A clearance survey involves a field survey of the project area to determine if T&E species that could live there, do live there. Clearance surveys should be conducted by a qualified biologist with an in-depth knowledge of local plant and animal species and their habitats.

DEFINITION – CRITICAL HABITAT

"Critical habitat" includes the land, water, and/or airspace that is determined, by the USFWS or NMFS, to be essential for the conservation of T&E species.

If the service does not identify any T&E species or critical habitat in or near your project area, you may still want to contact state or local wildlife agencies; and where appropriate, complete a clearance survey to confirm the presence/absence of any other plant or animal species protected by state or agency regulations. A qualified biologist familiar with federal, state, and agency lists of protected species will be able to help you decide if a clearance survey is necessary.

If the clearance survey finds evidence that T&E species or critical habitat occur or may occur in your project area, and may be negatively affected by the project, potential next steps depend on whether the project has any federal involvement (i.e., federal loans or other funds or use of public lands). Section 10.3.2 looks at ESA permitting with federal participation and Section 10.3.3 discusses permitting for projects with no federal involvement or control.

USEFUL TIP

If the service does not identify any listed or proposed T&E species or critical habitat, and a clearance survey confirms that no T&E or other protected species occur in or near your project area, then your project has sufficiently considered species of special concern.

It should be noted that these are very general descriptions of the ESA process, provided to give your cooperative some background into the

issues. Contact your local USFWS endangered species coordinator or talk with a qualified consultant to clear up any specific questions relating to your cooperative's activities.

10.3.2 Projects With Federal Involvement

USFWS Consultation

For projects with federal involvement (see box), the lead federal agency is responsible for consulting with the USFWS, where appropriate. Requesting a list of any T&E species or critical habitat that may occur in your project area from the USFWS is usually the first step in consultation. If the lead agency or USFWS determines that no T&E species or critical habitat occur in or near your project area, then ESA compliance is not an issue.

USEFUL TIP

The lead federal agency is generally the agency responsible for authorizing, permitting, or funding the proposed action. For example, if your proposed powerline easement crosses Bureau of Land Management (BLM) lands, then BLM would be considered the lead federal agency and they would be responsible for complying with ESA.

Biological Assessments

If the lead agency or USFWS identifies T&E species or critical habitat in or near your project area that may be affected, then the lead federal agency will continue consultation and probably prepare a Biological Assessment (BA) to determine whether the species are likely to be adversely affected by the proposed project. If, based on the BA, the lead agency and USFWS determine that the proposed project is not likely to adversely affect T&E species or critical habitat, then consultation is finished.

If, based on the BA, the lead federal agency or USFWS determines that T&E species are likely to be adversely affected by the proposed project, your cooperative may want to enter into formal consultation. Any activity found likely to jeopardize the continued existence of T&E species or adversely affect critical habitat cannot proceed without implementation of avoidance measures or granting of an ESA exemption. Any "take" incidental to the activity not posing jeopardy will be authorized by the service where measures to minimize take are implemented. A handbook titled "Endangered Species Consultation Handbook" is available from both USFWS and NMFS. Additionally, if informal consultation is not proceeding at a satisfactory pace, your cooperative may want to request formal consultation and its stricter timeline.

10.3.3 Projects Without Federal Involvement

USEFUL TIP

Habitat Conservation Plans allow USFWS to permit "taking" of endangered or threatened species incidental to otherwise lawful activities, provided the taking is minimized and mitigated by conservation measures.

Under Section 10 of the ESA, incidental take permits are generally required when otherwise lawful activities with no federal involvement cause a taking of T&E species. An example would be a privately financed cooperative project on private land, requiring no federal permits. In such a case, after your consultant determines that T&E animal species are present on the site and that the project may cause a "take," you should consider developing a Habitat Conservation Plan (HCP), joining in the development of an HCP already in progress, or participating in an existing HCP. The HCP must accompany your incidental take permit application. The local USFWS endangered species coordinator or a qualified consultant can help with HCP requirements.

Habitat Conservation Plan

The primary purpose of the HCP is to ensure that all practicable monitoring, minimization and mitigation efforts are undertaken to minimize take of listed species. Mitigation measures may include: preservation of existing habitat; enhancement or restoration of degraded or former habitat; creation of buffer zones around existing habitat, modifications of land use practices, and access restrictions.

A complete application for an incidental take permit generally includes the standard application form (available from your local USFWS office) and the HCP. Regulations governing take permits for terrestrial species are outlined in 50 CFR Part 17; and 50 CFR Part 222 and 223 for marine species.

10.3.4 Other Species of Special Concern

USEFUL TIP

"Species of special concern" is often used to identify plant and animal species protected by individual state and agency regulations but not necessarily protected by the ESA.

While the ESA only applies to T&E species listed in 50 CFR Part 17 or species proposed to be listed, and their critical habitat or proposed critical habitat, some state and federal government agencies maintain their own lists of protected species. The list of species protected under the ESA may be redundant with, a subset of, or more extensive than plant and animals species identified for protection by state and other federal agencies. Plant and animal species identified for protection by state or other federal agencies are often referred to as species of special concern (see box).

Consultation with all natural resource agencies with jurisdiction over your project is prudent.

10.3.5 Evolving Issues

Private Landowner Issues

USFWS is developing a "safe harbor" program, whereby incidental take of listed animal species is authorized as an incentive for conservation. Under this program, take is authorized provided the landowner supports species conservation efforts in the near-term, and the species population does not later drop below the level at the time the landowner enters the program should the landowner decide to change land-use practices.

The "No Surprises" policy is another new aspect of endangered species protection on private land. Under this policy, private landowners participating in the ESA through HCP efforts are assured that no new land restrictions or financial compensation will be required for species adequately covered by an approved HCP regardless of unforeseen future circumstances. This means that as long as the landowner make a good faith effort to abide by the approved HCP, the service will provide long-term predictability for your operations.

"Candidate" Species

The USFWS' regular "Notice of Review" presents an updated list of species that are regarded as candidates for possible listing under the ESA. While candidate species receive no statutory protection under the ESA, these species can become listed at any time and familiarity with candidate species in your project area will allow you to both protect them and prevent delays should they become listed. The 1996 Notice of Review contained 182 candidate species. The USFWS endangered species Internet home page (see 10.4.3) provides a list of these candidate species.

10.4 RESOURCES

10.4.1 Bibliography

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

U.S. Fish and Wildlife Service. 1988. *National List of Plant Species that Occur in Wetlands: 1988 National Summary*. Biological Report 88(24), September 1988.

Yocom, T.G., R.A. Leidy, and C.A. Morris. 1989. "Wetlands Protection through Impact Avoidance: A Discussion of the 404(b)(1) Alternatives Analysis." *Wetlands*, Volume 9(2):283-297.

10.4.2 Federal Agency Contacts

U.S. Fish and Wildlife Service
Division of Endangered Species
Mail Stop 452ARLSQ
1849 C Street, NW
Washington, DC 22040
(703) 358-2171

U.S. National Marine Fisheries Service
Office of Operations Management and Information
1315 East-West Highway
M/S SSMC3
Silver Spring, MD 20910
(301) 413-2239

U.S. Environmental Protection Agency
Mail Stop 4502F
401 M Street, SW
Washington, DC 20460
Wetland Hotline: (800) 832-7828

U.S. Army Corps of Engineers
CECW-OR
20 Massachusetts Avenue, NW
Washington, DC 20314
(202) 761-0199

10.4.3 Internet Resources

- Code of Federal Regulations - http://law.house.gov/4.htm
- National Wetlands Inventory - http://www.nwi.fws.gov/
- United States Fish and Wildlife Service - http://www.fws.gov/
- United States Environmental Protection Agency - http://www.epa.gov/
- United States Army Corps of Engineers - http://wetland.usace.mil/
- U.S. Fish and Wildlife Service endangered species home page- http://www.fws.gov/~r9endspp

10.4.4 Professional Organizations

- Society of Wetland Scientists
- Association of State Wetland Managers, Inc.